

## **SBIR Newsletter August 2004**

### **1.0 The Right Stuff: Building your Technical Team**

Go to your local library and you'll find stacks of books about teams, addressing everything from quality circles to global networking. No doubt you'll learn something from these books should you take the time to read them. But you still might not know how to build the team your SBIR agency is looking for—a technical team that provides the expertise and credibility needed to take your innovative idea from concept to prototype to commercialization.

Your technical team shouldn't be confused with your business team, which could be an advisory board, board of directors or the group of professionals you've assembled to provide specific business services (look for more about the business team in next month's newsletter). The technical team, on the other hand, is deeply involved in the research and development of your idea.

The first step in building this team is thinking through what special inputs—skills, knowledge, equipment and facilities—you need to push forward with your proposed research project. In Phase I, a technical team often consists of scientists and researchers whose specialized knowledge is needed to test the feasibility of your product, service or technology. In Phase II, the technical team frequently consists of some of the Phase I team members plus others with expertise in the commercialization process.

#### **Find the Right People**

You may have all the contacts you need to pull your technical team together. If not, there are several starting points for identifying potential team members:

- Your SBIR granting agency. Ask your federal SBIR contact for referrals to individuals and organizations who are already performing leading-edge work in your area. This is a good way to find technical support specific to your project as well as a good way to build your relationship with your granting agency.
- Research. If you've done literature and patent searches to verify that your idea is truly innovative, you've no doubt come across the names of the leading experts in your field. Contact these people directly and ask if they are interested in being involved in your project or if they can give you referrals to other potential team members.
- Universities. University-based researchers strengthen an SBIR proposal. That said, it is equally important to establish the working relationship that best meets your situation, not theirs. "The first thing to find out is what the university will require," says David Desch, executive director, Montana Board of Research and Commercialization, Helena. Most universities allow their faculty to work as independent contractors with certain restrictions. Others, however, claim ownership of anything their faculty members are involved in. Contact the school's Research Administration Office, which coordinates these kinds of requests, and

- explain your need. Ask for referrals but also be sure to ask about the university's policies and procedures regarding its faculty's work as independent contractors, as representatives of the university, and of the university facilities.
- Federal labs. Your SBIR agency might refer you to researchers at particular federal laboratories. You can also contact the Federal Laboratory Consortium ([www.flc.gov](http://www.flc.gov)) for referrals.
  - Other companies. Large companies might be willing to provide technical assistance if a potential commercial application of your innovation fits with their portfolio of products and services. Other small companies doing related work are also a potential source. Research of your technology area and its market will lead you to the companies with the potential best fit.

### **Know What You Need Up-Front**

Before you talk to any potential technical team member, decide exactly what it is that you need from them. "People want to help. They like working with others who are developing innovations, so money isn't always the deciding factor in getting their cooperation," Desch says. But, he warns, "you have to be clear about what you want so you can protect your interests."

What services do you want them to provide? What compensation are you willing to pay? Are you willing to give a company the exclusive license to your technology in exchange for its technical support?

Universities and major companies participate in research projects with an eye to revenue enhancement. Be sure you know their policies and procedures regarding ownership of the resulting intellectual property. Specify that you are interested in a work-for-hire arrangement covering specific services and not in a cooperative agreement or partnership, and then put the terms of agreement in writing and run it by a lawyer.

"It's best to have up-front legal advice," Desch points out. "As someone once said, 'Good legal advice is expensive, but bad legal advice is more expensive.'"

### **2.0 Competition Tips: New Horizon Technologies in Butte, MT Takes a Team Approach to Determining the U.S. Market for Specialized Poultry**

While some might not think of taste testing as an area of technical skill, New Horizon Technologies begs to differ. The for-profit subsidiary of the National Center for Appropriate Technology recently received an SBIR grant from the U.S. Department of Agriculture to study the adaptability of a specialized genetic line of poultry to the U.S. market, especially with small-scale farmers. Taste is one of the determining factors.

"There is a lot more to taste testing than most people realize, and it is a significant aspect of our project," says John Balsam, manager, New Horizon Technologies.

New Horizon Technologies identified a university with the facilities and experience to do taste testing as well as the desire to be part of the research project, and quickly signed a letter of agreement. Other technical team members under contract include two independent poultry growers, who are very involved in sustainable growing practices, and several industry leaders who will serve in an advisory role.

Negotiations for another potential team member, however, hit a snag. New Horizon Technologies understood that the researcher, who is on the faculty of a major midwestern university, would be working with the company as an independent contractor. The university, however, considers that the researcher's work would give the university ownership in the project. "We've gone through three iterations of the contract, and we are still trying to come to terms of agreement," Balsam says.

Given New Horizon Technologies' experience, Balsam offers the following competition tips for other SBIR candidates.

- Start negotiations with universities and federal labs as early as possible. Be clear from the outset what the expectations are on both sides. Ask the research administration contacts about the policies governing the researchers' work, and then talk to the researchers themselves about the policies as well.
- Balance your strengths and weakness. New Horizon's principal investigator for its SBIR project has excellent industry knowledge and contacts, but not a technically strong research background. "That was okay, because we surrounded her with team members who have the necessary technical skills," Balsam says.
- Get terms of agreement in writing. Always have letters of agreement or contracts with the team members specifying the scope of work, compensation and ownership rights. You are entering into a business agreement with team members, and you need to treat it as such.
- Be willing to pass on a "perfect" team member. It could be that terms cannot be reached with a potential team member. Find somebody else. An unhappy team member can sabotage the entire project.

### **3.0 Montana Companies Winning National Awards**

Montana beats national average with Phase 1 SBIR wins at the U.S. Department of Agriculture (USDA). The national average of proposals submitted to proposals won is normally 20%--Montana achieved a 47% win rate. Thirteen Montana companies submitted proposals to the USDA.

**Congratulations to all the SBIR award winners!**

#### **June Phase 0 Winner**

**Company: Arbuckle Ranch, Inc.**  
1745 Golden Boulevard  
Billings, MT 59102

Voice: (406) 655-7983  
Fax: (406) 655-7983

**Phase 0 Title:** Field-testing of harvester of seeds of native species to confirm design parameters for SBIR application

**Target Agency:** United States Department of Agriculture

**Principal Investigator:** [Lee Arbuckle](#)

### **July Phase 0 Winner**

**Company:** SecureNN Technologies

29 Carriage Lane

Helena, MT 59601

Voice: (406) 459-3784

Fax: (406) 457-8232

**Phase 0 Title:** Detecting insider attacks on an enterprise network environment

**Target Agency:** Department of Defense

**Principal Investigator:** [Edwin Pryor](#)

### **July Phase 1 Winners**

**Company:** HyPerspectives, Inc.

910 Technology Blvd., Suite A

Bozeman, MT 59718

Voice: (406) 556-9880

**Phase 1 Title:** Truth Quest: Enabling Operational/Exercise Data

**Target Agency:** U. S. Air Force

**Principal Investigator:** [Timothy Ross](#)

**Company:** Timberwolf Corporation

PO Box 1328

Whitefish, MT 59937-1328

Toll Free: 1-800-733-6845

**Phase 1 Title:** Keyhole Squeeze-Off Tool to Enable Repair of Large (4" and 6") Polyethylene Gas Pipe

**Target Agency:** Department of Energy

**Principal Investigator:** [Ken Green](#)

### **The Six Phase 1 SBIR winners are:**

**Company:** [Bitterroot Restoration Inc.](#)

445 Quast Lane

Corvallis, MT 59828

Voice: (406) 961-4991  
Fax: (406) 961-4626

**Amount:** \$79,946/6 Months

**Principal Investigator:** [Tim Meikle](#)

**Topic:** Alternative Growth Medium Product to Promote VAM Colonization

**Company:** [Forest Biometrics](#)

53 Trestle Creek Drive  
St. Regis, MT 59866  
Voice: (406) 649-0040

**Amount:** \$69,200/6 Months

**Principal Investigator:** [Dr. James D. Arney](#)

**Topic:** Establishment of the Forest Biometrics Institute - Research Database

**Company:** MedIntel

313 N. California Street  
Helena, MT 59601  
Voice: (406) 449-4741

**Amount:** \$80,000/6 Months

**Principal Investigator:** [Timothy Lee Nagel](#)

**Topic:** Predicting Pesticide Toxicity via QSAR and Ensembles

**Company:** [Land EKG, Inc.](#)

6085 Browning Lane  
Bozeman, MT 59718  
Voice: (406) 582-7480

**Amount:** \$79,828/6 Months

**Principal Investigator:** [Charles Orchard](#)

**Topic:** Computerized Rangeland Level III Monitoring System

**Company:** New Horizon Technologies, Inc.

P.O. Box 500  
3040 Continental Drive  
Butte, MT 59702

**Amount:** \$79,720/6 Months

**Principal Investigator:** [Ms. Holly Born](#)

**Topic:** Applying French Label Rouge Poultry System to the US "Pastured Poultry" Movement

**Company:** Montec Research

1901 South Franklin

Butte, MT 59701  
Voice: (406) 723-2222

**Amount:** \$80,000/6 Months

**Principal Investigator:** [Steven McGrath](#)

**Topic:** Innovative Enzymatic Reactor For Production of Alternative Fuels

#### **Phase 0 Winners for May 2002**

**Congratulations to the winners of the May Phase 0 grants!**

**Company: Skylark Technology**

Barry Chalmers & Gerald Myers  
98 US Highway 2 E, Suite #7  
Glasgow, MT 59230-2030  
Voice: (406) 228-9303

**Phase 0 Title:** Bio-Inspired Document Recognition System

**Target Agency:** National Science Foundation

**Principal Investigator:** [Barry Chalmers](#)

**Company: Sustainable Systems LLC**

Paul T. Miller  
Montana Biodiesel  
91 Campus Drive PMB 1005  
Missoula, MT 59812  
Voice: (406) 243-4269

**Phase 0 Title:** Development of Continuous Flow Process Techniques for the Conversion of Montana Grown Vegetable Oils to Alternate Renewable Fuels

**Target Agency:** United States Department of Agriculture

**Principal Investigator:** [Paul T. Miller](#)

WE DO OUR BEST TO IDENTIFY EVERY AWARD WINNER, BUT WE MAY HAVE ACCIDENTALLY MISSED YOUR COMPANY. IF WE HAVE, PLEASE NOTIFY LINDA BRANDER (406) 841-2749 or [lbrander@state.mt.us](mailto:lbrander@state.mt.us)

#### **4.0 Solicitations**

| Open Solicitations                             |               |                   |                          |
|------------------------------------------------|---------------|-------------------|--------------------------|
| Program                                        | Release Dates | Accepts Proposals | Closing Dates            |
| <a href="#">HHS/NIH SBIR/STTR (Contracts)</a>  | 1 Aug 2002    | 1 Aug 2002        | 8 Nov 2002               |
| <a href="#">DoD SBIR - 2002.2</a>              | 1 May 2002    | 1 Jul 2002        | 14 Aug 2002              |
| <a href="#">HHS/ACF SBIR</a>                   | 26 Jun 2002   | 26 Jun 2002       | 15 Aug 2002              |
| Administration for Children & Families         |               |                   |                          |
| <a href="#">HHS/Trans-NIH SBIR PA (Grants)</a> | 3 Jun 2002    | 3 Jun 2002        | 1 Aug 2002<br>1 Dec 2002 |
| Bioengineering Nanotechnology Initiative       |               |                   |                          |
| <a href="#">NASA STTR</a>                      | 6 Jun 2002    | 6 Jun 2002        | 21 Aug 2002              |

|                                                                       |             |             |                                        |
|-----------------------------------------------------------------------|-------------|-------------|----------------------------------------|
| <a href="#">NASA SBIR</a>                                             | 6 Jun 2002  | 6 Jun 2002  | 21 Aug 2002                            |
| <a href="#">USDA SBIR</a>                                             | 5 Jun 2002  | 5 Jun 2002  | 30 Aug 2002                            |
| <a href="#">NSF SBIR/STTR</a><br>for BT & EL only                     | 1 Mar 2002  | 10 Oct 2002 | 22 Jan 2003                            |
| <a href="#">HHS/NIH SBIR/STTR (Grants)</a><br>Non-Aids Related Topics | 15 Jan 2002 | 15 Jan 2002 | 1 Apr 2002<br>1 Aug 2002<br>1 Dec 2002 |
| <a href="#">HHS/NIH SBIR/STTR (Grants)</a><br>Aids Related Topics     | 15 Jan 2002 | 15 Jan 2002 | 1 Apr 2002<br>1 Aug 2002<br>1 Dec 2002 |
| <a href="#">HHS/CDC SBIR (Grants)</a>                                 | 15 Jan 2002 | 15 Jan 2002 | 1 Dec 2002                             |
| <a href="#">HHS/FDA SBIR (Grants)</a>                                 | 15 Jan 2002 | 15 Jan 2002 | 1 Apr 2002<br>1 Aug 2002<br>1 Dec 2002 |

For a complete overview of all solicitations go to: <http://www.zyn.com/sbir/scomp.htm>

### **New NIH SBIR Grant from the trans-NIH Bioengineering Consortium (BECON)**

As part of the Bioengineering Nanotechnology Initiative, BECON has issued a Program Announcement (PA), inviting grant applications for Small Business Innovation Research (SBIR) projects on nanotechnologies useful to biomedicine. Nanotechnology is defined as the creation of functional materials, devices and systems through control of matter at the scale of 1 to 100 nanometers, and the exploitation of novel properties and phenomena at the same scale.

In recognition of the nascence of this area, the duration and amounts of individual grants awarded under the PA may be greater than those routinely allowed under the SBIR program. Few small businesses possess the highly specialized resources needed for nanoengineering. Therefore, this PA encourages team approaches to research in the belief that a synergistic blend of expertise and resources may be needed to allow for strong partnerships between the small businesses and other entities in Phase I. Applications are encouraged from teams of investigators from commercial, academic and other sectors of the research community.

Receipt dates are listed as August 1, 2002 and December 1, 2002. For further information please see the NIH Bioengineering Nanotechnology Initiative PA located at: <http://grants1.nih.gov/grants/guide/pa-files/PA-02-125.html>.

### **DHHS Issues New Administration for Children and Families Pre-Solicitation Announcement**

The Administration for Children and Families, via the Program Support Center under the United

### **5.0 State Conferences and Workshops**

**SBIR Phase I Proposal Writing Workshop**, Jim & Gail Greenwood, nationally renowned SBIR consultants will be the presenters. Free. Must [pre-register](#) and space is limited. Register online. October 16, Missoula, MT, The Inn on Broadway, 9:00 AM to 4:30 PM.

**SBIR Phase II Proposal Workshop**, Missoula, MT, Jim and Gail Greenwood will be the presenters. Free. Must [pre-register](#), free, register online. October 17, Missoula, MT, The Inn on Broadway, 9:00 AM to 4:30 PM.

**Developing a Commercialization Plan for Your SBIR Innovation**, Marcia Rorke, Mohawk Research will be the presenter. Details to be announced. October 22, Helena, MT, 9:00 AM to 4:00 PM. October 23, Bozeman, MT 9:00 AM to 4 PM

**From Invention to Commercialization**, How to Turn Your Ideas into Cash, Marti Elder, Invention Development Consultant will be the presenter. Details to be announced. October 30, Miles City, MT 8:30 AM to 4:30 PM.

### **Regional/National Conferences and Workshops**

**National SBIR Fall Conference**, Burlington, VT, October 28-31, 2002. Details to be released at a later date. To receive notification contact:  
<http://www.zyn.com/sbir/cal/index.htm#burlington>

## **6.0 Resources**

To identify:

**Resource areas and the names of researchers** at the USDA Agricultural Research Stations in Montana, go to: <http://sbir.state.mt.us/Includes/focusareas.asp>

Scientists and/or academic professional at **Montana State University**, Bozeman, MT  
Contact: [Dr. Rebecca Mahurin](#), (406) 994-2460.

Scientists and/or academic professional at the **University of Montana**, Missoula, MT  
Contact: [Dr. Tony Rudbach](#), (406) 243-6670.

A federal lab in your region or area of research make a connection via the **Federal Lab Consortium** at [http://www.federallabs.org/laboratories\\_national.html](http://www.federallabs.org/laboratories_national.html)